

REMARKS

Applicants respectfully request reconsideration of the rejections in view of the foregoing amendments and the following remarks.

Claim Status

Claims 1-23 remain pending. Claims 1, 11, 14, and 19 have been amended.

Rejections Under 35 USC § 103

Claims 1-7, 9, and 11-18 stand rejected under 35 USC § 103(a) as being unpatentable over “Applicant’s Admitted Prior Art” (hereafter, “Conventional OFDM”) in view of U.S. Patent 6,359,933 (“Aslanis”). Claims 8 and 19-23 stand rejected under 35 USC § 103(a) as being unpatentable over Conventional OFDM in view of Aslanis and further in view of U.S. Patent 5,748,677 (“Kumar”). Applicants respectfully traverse these rejections because the cited art fails to teach or suggest every element of the claims.

For example, independent claims 1 and 19 recite “a detection module configured to determine a channel symbol from the frequency component amplitudes while accounting for correlation between the frequency component amplitudes of the digital receive signal”. This element is absent from Conventional OFDM. The examiner cites Aslanis at c1ℓ55–60, c3ℓ8–12, c5ℓ29–33, c6ℓ30–40, c8ℓ25–44, and c10ℓ41–61, as teaching this element. However, Aslanis fails to teach accounting for correlation between frequency component amplitudes of the digital receive signal. Rather, Aslanis teaches correlating frequency components of the receive signal with an entirely separate predetermined synchronization sequence. See Aslanis Fig. 1, elements 58 and 60; c8ℓ25–44 (“these synchronizing frame contents are also supplied . . . to the correlator 60 where

they are correlated with the **synchronizing sequence from the store 58**" (emphasis added)); c3ℓ34–36 ("correlating complex amplitudes of a synchronizing frame of the system with a synchronizing pattern stored at the receiver"); c7ℓ35–37 ("receiver 12 includes a synchronizing sequence source 58 which corresponds to and produces the same synchronizing sequence as the source"); c7ℓ44–46 ("synchronizing sequence from the source 58 is supplied to the correlator").

Thus, the correlation discussed by Aslanis involves only a comparison of the receive signal with a predetermined sequence. There is no teaching that the frequency components of the receive signal are correlated among themselves and no suggestion that such correlation should be identified and removed. To emphasize the difference between Aslanis and the claimed invention, applicants amend claim 1 to read "accounting for correlation between the frequency component amplitudes of the digital receive signal". For at least these reasons, applicants respectfully request allowance of independent claims 1 and 19, along with their dependent claims 2-9 and 20-23.

Independent claims 11 and 14 recite "determining a channel symbol associated with the set of frequency component amplitudes while accounting for correlation between the frequency component amplitudes associated with the channel symbol interval of the receive signal". As discussed above, the cited art fails to teach or suggest accounting for correlation between frequency component amplitudes of a receive signal. For at least this reason, applicants respectfully request allowance of independent claims 11 and 14, along with dependent claims 12-13 and 15-18.

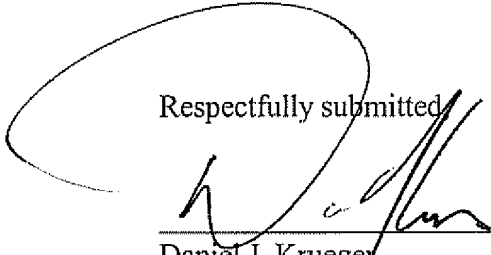
Appl. No. 09/865,238
Amdt. dated June 13, 2006
Reply to Office action of March 20, 2006

Conclusion

In the course of the foregoing discussions, applicant may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art which have yet to be raised, but which may be raised in the future.

If any fees are inadvertently omitted or if any additional fees are required or have been overpaid, please appropriately charge or credit those fees to Conley Rose, P.C. Deposit Account Number 03-2769/1789-04801/HDJK.

Respectfully submitted,



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